

**LISTING OF THE CLAIMS**

Please cancel claims 1-9, 12-22 and 25-31 without prejudice or disclaimer of the subject matter recited therein; and

Please amend claims 10, 23 and 24 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claims 1-9 (Canceled).

10. (Currently Amended) ~~The method of claim 7,~~ A method for analyzing the timing of a circuit, comprising:

determining at least one location information for one or more inputs to a timing test;

computing a timing slack for the timing test using the at least one location information; and

one of:

designing the circuit based on the analysis of the timing; and

identifying the cause of timing failures in an existing circuit,

wherein the at least one location information comprises a centroid of the one or more inputs to the timing test, and

wherein said determining comprises:

calculating a first centroid of a first input to the timing test;

calculating a second centroid of a second input to the timing test; and  
determining the distance between the first and second centroids.

11. (Original) The method of claim 10, wherein said calculating comprises:  
determining a slack variation factor based on the distance between the first and  
second centroids; and  
adding the slack variation factor to a timing slack calculated for the one or more  
inputs to the timing test.

Claims 12-22 (Canceled).

23. (Currently Amended) ~~The medium of claim 20,~~ A computer-readable medium  
containing instructions that, when executed, cause a computer to:

determine at least one location information for one or more inputs to a timing test;

compute a timing slack for the timing test using the at least one location  
information; and

one of:

design a circuit; and

identify the cause of timing failures in an existing circuit,

wherein the at least one location information comprises a centroid of the one or  
more inputs to the timing test, and

wherein said determining comprises:

calculating a first centroid of a first input to the timing test;  
calculating a second centroid of a second input to the timing test; and  
determining the distance between the first and second centroids.

24. (Original) The medium of claim 23, wherein said computing comprises:

determining a slack variation factor based on the distance between the first and  
second centroids; and

adding the slack variation factor to a timing slack calculated for the one or more  
inputs to the timing test.

Claims 25-31 (Canceled).